CLAIMS:

What is claimed is:

1. A computer-program-based method for providing a feedback control for a given set of entry and target control quantities χ and μ of a system model, the method comprising a repetition of the following steps:

a) providing a starting value χ'_1 for each of said entry control quantities χ in said model,

b) running the model based on said starting values and obtaining a resulting actual value for each of said target control quantities μ,

c) using the values obtained for μ to define a new start value for χ for use in a repeated modeling step,

whereby the method comprises the following formula to calculate the respective next value of the entry control quantities:

$$x'_{n+1} = \frac{v_n}{1+\rho_n(1-v_n)} \qquad 6a)$$

where ρ_n is a suitable parameter and

$$v_n = (n+1)u - nu_n \qquad (6b)$$

χ'_n is valid for the next iteration only while μ_n and ρ_n are values measured from the beginning of the simulation.

2. The method according to claim 1 further comprising simulating a multi-processor system in which said control quantities are CP utilizations in a computer system model.

3. A computer program product for providing a feedback control for a given set of entry and target control quantities χ and μ of a system model, said computer program product comprising:

a computer readable medium having recorded thereon computer readable program code performing the method comprising a repetition of the following steps:

a) providing a starting value χ'_1 for each of said entry control quantities χ in said model,

b) running the model based on said starting values and obtaining a resulting actual value for each of said target control quantities μ,

c) using the values obtained for μ to define a new start value for χ for use in a repeated modeling step,

whereby the method comprises the following formula to calculate the respective next value of the entry control quantities:

$$\chi'_{n+1} = \frac{\nu_n}{1+\rho_n(1-\nu_n)} \qquad 6a)$$

where ρ_n is a suitable parameter and

$$\nu_n = (n+1)\mu - n\mu_n \qquad (6b)$$

χ'_n is valid for the next iteration only while μ_n and ρ_n are values measured from the beginning of the simulation.

4. The computer program product according to claim 3 wherein the method further comprises simulating a multi-processor system in which said control quantities are CP utilizations in a computer system model.

5. A computer system for providing a feedback control for a given set of entry and target control quantities χ and μ of a system model, the computer system comprising:

a) a starting value χ'_1 for each of said entry control quantities χ in said model,

b) a control element running the model based on said starting values and obtaining a resulting actual value for each of said target control quantities μ,

c) said control element using the values obtained for μ to define a new start value for χ for use in a repeated modeling step,

whereby the control element uses the following formula to calculate the respective next value of the entry control quantities:

$$x'_{n+1} = \frac{v_n}{1+\rho_n(1-v_n)} \qquad 6a)$$

where ρ_n is a suitable parameter and

$$v_n = (n+1)u - nu_n \qquad (6b)$$

χ'_n is valid for the next iteration only while μ_n and ρ_n are values measured from the beginning of the simulation.

6. The computer system according to claim 5 wherein said control element simulates a multi-processor system in which said control quantities are CP utilizations in a computer system model.